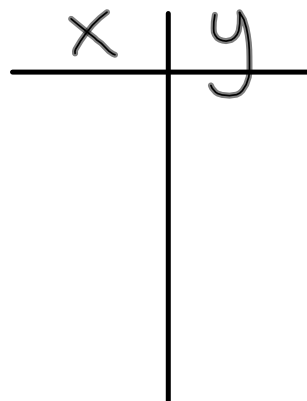


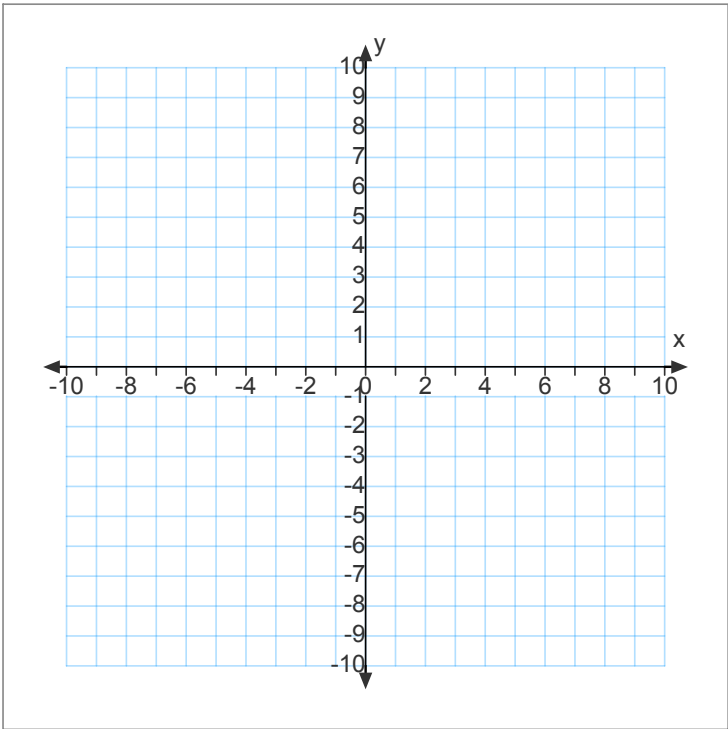
Today's Objective: to identify linear equations, and graph linear equations

1. to graph a linear equation, first solve the equation for y

$$x + 2y = 6$$

2. make an x-y table, then choose five values for the domain (the input) and determine the range (output)





Standard form of a linear equation

If an equation is linear,
it can be written in
standard form:

$Ax + By = C$, where $A \geq 0$, A and B are not both zero, and A, B, C are integers whose GCF is 1.

Determine whether each equation is a linear equation. If so, write the equation in standard form.

linear equation?

standard form

1. $2x = 4y$

2. $6 + y = 8$

3. $3xy + 8 = 4y$

4. $3x - 4 = 12$

5. $4x - 2y = -1$

6. $y = x^2 + 7$

7. $y - 4x = 9$

8. $x + 8 = 0$

9. $-2x + 3 = 4y$

Determine whether each equation is a linear equation. If so, write the equation in standard form.

linear equation?

standard form

1. $2 + \frac{1}{2}x = y$

2. $\frac{1}{4}y = 12 - 4x$

3. $3xy - y = 8$

4. $2x + 2y = y$

5. $yx - 2 = 8$

6. $6a - 2b = 8 + b$

7. $\frac{1}{4}x - 12y = 1$

8. $3 + x + x^2 = 0$

9. $x^2 = 2xy$

Homework: Page 221, 16-24 even